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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,214	10/035,214 01/04/2002		Andrew Baker	53394.000548	3478
56679	7590	05/25/2006		EXAMINER	
GOSZ ANI		•	ANDERSON, CATHARINE L		
LEXINGTON, MA 02420				ART UNIT	PAPER NUMBER
				3761	

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/035,214	BAKER, ANDREW					
Office Action Summary	Examiner	Art Unit					
	C. Lynne Anderson	3761					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠ Responsive to communication(s) filed on <u>17 M</u>	arch 2006.						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.							
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>10,11 and 34-59</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5)⊠ Claim(s) <u>11 and 45-59</u> is/are allowed.							
6)⊠ Claim(s) <u>10 and 34-44</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner.							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		ate Patent Application (PTO-152)					
Paper No(s)/Mail Date	6) Other:						
U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05) Office A	ction Summary P	art of Paper No./Mail Date 20060522					

## **DETAILED ACTION**

# Allowable Subject Matter

The indicated allowability of claims 10 and 12- is withdrawn in view of the newly discovered reference(s) to Popper (4,346,802). Rejections based on the newly cited reference(s) follow.

Claims 11 and 45-59 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to disclose the claimed invention, specifically a combining drum in combination with the apparatus claimed. The use of a combining drum allows the production to operate at higher speeds, and therefore be more productive, as described in the paragraph bridging pages 52 and 53 of the instant specification.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10 and 34-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen (5,807,364) in view of Popper (4,346,802).

Hansen discloses all aspects of the claimed invention but remains silent as to the portion of the apparatus that deposits the particulate matter. Hansen

Art Unit: 3761

discloses an apparatus for depositing particulate matter 84 into a supply of fibrous material 32, as shown in figure 2. The particulate matter 84 is deposited from a device 72 having an outlet positioned above the supply of fibrous material 32, as shown in figure 2. Hansen discloses in column 9, lines 8-10, that any suitable device for depositing the particulate matter may be used.

Popper discloses an apparatus for depositing particulate matter, as shown in figure 5, comprising a feed tray 70 having an open top providing an inlet for receiving a supply of particulate matter from outlet funnel 10. A shuttle pan 78 is slideably positioned to form the lower pan of the feed tray 70, as shown in figure 5. A mechanism, the vibration means, moves the shuttle pan 78 through a range of motion comprising strokes, as disclosed in column 4, lines 16-25. The shuttle pan 78 comprises an outlet offset in the machine direction from the inlet, as shown in figure 5. The shuttle pan 78 is angled, as shown in figure 5, and therefore will not be parallel to the conveying mechanism. The range of motion of the outlet edge is dictated by the axis indicated by arrow 106, as shown in figure 7, which is not parallel with the shuttle pan. Therefore, the range of motion of the outlet edge will have an amplitude, as disclosed in column 7, lines 7-9, resulting in a minimum and a maximum offset distances. Since the range of motion is limited by springs 92, as shown in figure 7, the maximum offset distance will inherently be limited to under 300% of the minimum offset distance. The apparatus taught by Popper allows the discharge of particulate matter in an efficient manner, as disclosed in column 1, lines 54-64.

Art Unit: 3761

It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the apparatus of Hansen with the feed tray and shuttle pan of Popper to allow the discharge of particulate matter in an efficient manner.

With respect to claim 34, the particulate matter comprises superabsorbent polymer, as disclosed in column 8, lines 52-56.

With respect to claim 35, the fibrous substrate material comprises cellulose acetate, as disclosed in column 11, lines 54-60.

With respect to claim 36, Popper discloses the shuttle pan 78 comprises the lower pan of the feed tray 70, as shown in figure 5.

With respect to claims 37-39, it would have been obvious to one of ordinary skill in the art at the time of invention to make the range of motion comprise a stroke distance of 6 and 9 inches since it has been held that where the general conditions of the claim (i.e. the shuttle pan moving in stroke range of motion to distribute particulate matter), finding the optimum or workable ranges involves only routine skill in the art. *In re Allen*. 105 USPQ 233.

With respect to claim 40, the feed tray 70 is vibratory, as disclosed in column 4, lines 11-12.

With respect to claim 41, the feed tray 70 may be fixed, as disclosed in column 6, line 68.

With respect to claim 42-44, Popper further discloses a metered flow device, but remains silent as to the method of metering the flow into the shuttle pan. Auger-type and weight-based metering devices are well-known in the art for allowing flow of particulate matter from a hopper during dispensing. It would

Art Unit: 3761

therefore be obvious to one of ordinary skill in the art at the time of invention to construct the apparatus of Popper with an auger-type of weight-based metering device to provide control over the particulate matter as it is dispensed.

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 4,972,970 discloses a vibratory feed tray.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (571) 272-4932. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3761

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CUA

May 22, 2006

TATYANA ZALUKAEVA SUPERVISORY PRIMARY EXAMINER